

Appl. No.: 10/708,996
Amdt. Dated: 5/8/2006
Reply to Office action of: 03/07/2006

AMENDMENTS TO THE DRAWINGS:

There are no amendments to the drawings being presented herewith.

Appl. No.: 10/708,996
Amdt. Dated: 5/8/2006
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REMARKS/ARGUMENTS

Applicants acknowledge that the previous rejections to the claims under 35 U.S.C. 102(b) have been overcome and withdrawn by the Examiner.

There have been no amendments to the specification or drawings included with this response.

Claims 1 – 16 remain in this application. Claims 1, 4, 5, 8, 9, 12, 13, and 16 have been amended to overcome rejections based on the claims being "...vague and indefinite" as well as to correct minor editorial and typographical errors.

No new matter has been introduced by these amendments.

Claims 1 – 16 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner states:

In claim 1, line 5, "the passenger foot area" lacks antecedent basis. On line 6, "the space previously occupied by the seat cushion" lacks antecedent basis. On lines 14 – 15, "the other end of each of said two pair of seat legs moveably mounted to a vehicle floor" reads as if the Applicant intends to claim the "seat assembly" in combination with the "vehicle floor". In the preamble to the claim, Applicant has claimed a "split folding seat assembly for mounting to a vehicle floor". Here, the "vehicle floor" is not part of the invention. But when Applicant defines the "seat legs" as "mounted to a vehicle floor", Applicant is claiming the "vehicle floor" as part of the invention. This problem is repeated on line 22 with Applicant defines "a pair of parallel tracks, fixedly mounted to a vehicle floor." Again, the claim reads as if the vehicle floor" I part of the invention. Applicant either needs to change the language to more proper language such as – for mounting – or – to be mounted – or – adapted to be mounted –. All of the aforementioned problems are repeated in claims 5, 9, and 13.

In claims 4, 8, 12, and 16, the phrase "said folding seat assembly is mounting" is unclear and confusing language. Should "mounting" be changed to – to be mounted – or – for mounting – or – or adapted to be mounted –

Appl. No.: 10/708,996
Amdt. Dated: 5/8/2006
Reply to Office action of: 03/07/2006

The aforementioned problems render the claims vague and indefinite. Clarification and/or correction is required.

Applicant respectfully traverses this rejection. The present claims as currently amended provide claims correct the error causing indefiniteness pointed out by the Examiner. Applicant thanks the Examiner for his suggestions regarding correcting these errors. Clearly, when viewed in this light this rejection is now moot and Applicant respectfully requests this rejection be removed.

Claims 1, 4 – 5, 8 – 9, 12 – 13, and 16 were rejected under 35 U.S.C. 102(b) as being anticipated by Sturt et al (U.S. Patent No. 6,099,072). Specifically, the Examiner states:

Sturt et al teach a split folding and reclining seat assembly for mounting to a vehicle floor comprising a pair of passenger seats 10 which may be independently folded from a seating position to a cargo position and back with a minimum of effort for use in a vehicle providing a split folding seat assembly in which the seat cushion is moved forward and downward into the passenger foot area and the seat back is moved forward and downward into the space previously occupied by the seat cushion providing a flat load floor over a cargo area and the seat back comprising in cooperative combination: a pair of seat cushion frames, each of said seat cushion frames being moveably mounted by their front edges to a pair of legs 50, and said pair of seat cushion frames rear edges moveably mounted to a corresponding pair of seat back frames 12 by a pair of seat folding links and further each said seat cushion frame having a seat cushion mounted thereon; two pair of seat legs 50 having one end of each of said two pair of seat legs moveably mounted to the front edge of each of said seat cushion frames and the other end of each of said two pair of seat legs moveably mounted to a vehicle floor; a pair of seat back frames, each of said seat back frames being moveably mounted on their bottom edges to the rear edge of the corresponding seat cushion frame by a pair of seat folding links, and further attached by their bottom edges by a pair of hinges to a pair of parallel seat tracks 48, and further each of said pair of seat back frames having a head restraint mounting member to which are attached a desired number of head restraints (See Fig. 3) and each of said seat

Appl. No.: 10/708,996
Amdt. Dated: 5/8/2006
Reply to Office action of: 03/07/2006

back frames having a seat back cushion mounted thereon, and a pair of parallel tracks fixedly mounted to a vehicle floor for each of said pair of passenger seats having a seat back frame mounted thereto by means of a hinge allowing the seat backs to be independently moved laterally along the pair of parallel tracks during the folding and the unfolding of each of said passenger seats, said split folding seat assembly is adapted to be mounted on a vehicle floor having a configuration allowing said split folding seat assembly when in a folded position to provide a cargo surface contiguous with the vehicle cargo floor.

Applicant respectfully traverses this rejection. The key to Applicants' invention is a folding split seat assembly which allows for the easy rising and lowering of one or both of the split seats where the seat folds downward and forward so that the folding front legs and the seat cushion and seat back may be lowered into the foot well of a vehicles floor pan thus eliminating the need for special floor pan designs to receive same. Further, Applicant's invention provides for a means of moving the seat cushion forward and downward into a portion of the foot well area of a floor pan and then allowing the seat back to move downward into the space previously occupied by the seat cushion when it was in the seating or use position. Additionally, Applicant's claimed invention provides for an additional head restraint support allowing the mounting of more than one head restraint on a single seat back, and an assembly configuration with provision for under seat storage compartments.

A fair reading of Sturt et al (U.S. Patent No. 6,099,072) discloses a folding seat comprising a special floor pan having a special set of tracks for receiving rollers of a seat mounting bracket (see for example, Col. 1, lines 58 – 64, Col. 3, lines 35 – 39, and Col. 3, lines 49 – 53), the necessity of having seat cushion frame front legs that have a means of changing length to accommodate the necessity of maintaining a parallelogram linkage configuration during the movement of the seat assembly from a use to a cargo position and back (see for example, Col. 2, lines 12 – 18, Col. 3, lines 40 – 48, and Col. 4, lines 60 – 67), and a cargo position seat assembly wherein the seat back is stacked on top of the seat cushion (see for example, Col. 1, lines 42 – 44, Col. 2, lines 31 – 34, and Col. 4, lines 9 – 17). Particularly not required, utilized, or optional in Applicant's claimed invention are the critical elements of the Sturt et al (U.S. Patent No. 6,099,072) reference, namely a floor well specifically having especially designed tracks for receiving seat

Appl. No.: 10/708,996
Amdt. Dated: 5/8/2006
Reply to Office action of: 03/07/2006

mounting rollers, variable length folding legs that must change length to allow for the seat cushion to move from a use position to a storage position, and after positioning the seat assembly in a closed or cargo position end up with a stacked seat cushion seat back arrangement. There is nothing in the Sturt et al (U.S. Patent No. 6,099,072) reference which discloses, teaches or suggests to one skilled in the art how to eliminate the critical elements of the reference, namely the special floor well, variable length legs and means of achieving said length changes, and a non-stacked cargo position seat, to arrive at Applicant's claimed invention. Furthermore, in light of the fact that Applicant's claimed invention specifically is limited to a folding split seat assembly not having such special floor well, or variable front leg length means, there is clearly no way one skilled in the art can arrive at Applicant's invention from the Sturt et al (U.S. Patent No. 6,099,072) reference without first having read Applicant's application.

Clearly, when viewed in this light the Sturt et al (U.S. Patent No. 6,099,072) reference does not disclose, teach, or suggest the rear fold down cargo seat with tilt down cushion of Applicants' present invention eliminating the critical Sturt et al (U.S. Patent No. 6,099,072) reference elements of a special floor well, variable length front legs, and a stacked folded seat.

Claims 1, 4 – 5, 8 – 9, 12 – 13, and 16 were rejected under 35 U.S.C. 102(b) as being anticipated by Sturt et al (U.S. Patent No. 6,123,380). Specifically, the Examiner states:

Sturt et al teach a split folding and reclining seat assembly for mounting to a vehicle floor comprising a pair of passenger seats 10 which may be independently folded from a seating position to a cargo position and back with a minimum of effort for use in a vehicle providing a split folding seat assembly in which the seat cushion is moved forward and down ward into the passenger foot area and the seat back is moved forward and downward into the space previously occupied by the seat cushion providing a flat load floor over a cargo area and the seat back comprising in cooperative combination: a pair of seat cushion frames 12, each of said sat cushion frames being moveably mounted by their front edges to a pair of legs, and said pair of seat cushion frames rear edges moveably mounted to a corresponding pair of seat back frames 13 by a pair of seat folding links and further each said seat cushion frame

Appl. No.: 10/708,996
Amdt. Dated: 5/8/2006
Reply to Office action of: 03/07/2006

having a seat cushion mounted thereon; two pair of seat legs 138 having one end of each of said two pair of seat legs moveably mounted to the front edge of each of said seat cushion frames and the other end of each of said two pair of seat legs moveably mounted to a vehicle floor; a pair of seat back frames, each of said seat back frames being moveably mounted on their bottom edges to the rear edge of the corresponding seat cushion frame by a pair of sate folding links, and further attached by their bottom edges by a pair of hinges to a pair of parallel seat tracks 46, and further each of said pair of seat back frames having a head restraint mounting member to which are attached a desired number of head restraints and each of said seat back frames having a seat back cushion mounted thereon, and a pair of parallel tracks fixedly mounted to a vehicle floor for each of said pair of passenger seats having a seat back frame mounted thereto by means of a hinge allowing the seat backs to be independently moved laterally along the pair of parallel tracks during the folding and unfolding of each of said passenger seats, said split folding seat assembly is adapted to be mounted on a vehicle floor having a configuration allowing said split folding seat assembly when in a folded position to provide a cargo surface contiguous with the vehicle cargo floor.

Applicant respectfully traverses this rejection. The key to Applicants' invention, as mentioned above, is a folding split seat assembly which allows for the easy rising and lowering of one or both of the split seats where the seat folds downward and forward so that the folding front legs and the seat cushion and seat back may be lowered into the foot well of a vehicles floor pan thus eliminating the need for special floor pan designs to receive same. Further, Applicant's invention provides for a means of moving the seat cushion forward and downward into a portion of the foot well area of a floor pan and then allowing the seat back to move downward into the space previously occupied by the seat cushion when it was in the seating or use position. Additionally, Applicant's claimed invention provides for an additional head restraint support allowing the mounting of more than one head restraint on a single seat back, and an assembly configuration with provision for under seat storage compartments.

A fair reading of Sturt et al (U.S. PatentNo.6,123,380)disclosesafoldingseat comprising a special floor pan for receiving both a front set of tracks and a rear set of

Appl. No.: 10/708,996
Amdt. Dated: 5/8/2006
Reply to Office action of: 03/07/2006

tracks (see for example, Col. 1, lines 54 – 61, Col. 2, lines 29 – 32, Col. 4, lines 8 – 19, and Figs. 2, 6, 15a, 15b, and 16a – h), a seat assembly requiring that the seat back be stacked on top of the seat cushion before the folded seat assembly is moved forward (see for example, Col. 2, lines 7 – 10, Col. 9, lines 25 – 50, and Figs. 16d – 16h), having its front edge only lowered into the foot well area (see for example, Col. 9, lines 25 – 50, and Figs. 16f – 16g) and then disconnecting the rear of the folded seat assembly from the rear pair of tracks and then moved a second time forward to allow the rear of the folded seat assembly to be lowered into the foot well area to provide a flat cargo area of the folded seat assembly (see for example Col. 1, lines 49 – 54, Col. 2, lines 13 – 16, and Col. 9, lines 25 – 50, and Fig. 16h). There is nothing in the Sturt et al (U.S. Patent No. 6,123,380) reference which discloses, teaches, or suggests to one skilled in the art how to eliminate the critical elements of the reference, namely the special floor well to receive two separate pair of tracks, the requirement of disconnecting the rear seat frame assembly from the rear set of tracks and subsequently moving the folded seat assembly forward a second time, and a non-stacked cargo position seat, to arrive at Applicant's claimed invention. Furthermore, in light of the fact that Applicant's claimed invention specifically is limited to a folding split seat assembly not having such special floor well, or the critical requirement and means of disconnecting the seat assembly from the rear tracks, there is clearly no way one skilled in the art can arrive at Applicant's invention from the Sturt et al (U.S. Patent No. 6,123,380) reference without first having read Applicant's application.

Clearly, when viewed in this light the Sturt et al (U.S. Patent No. 6,123,380) reference does not disclose, teach, or suggest the rear fold down cargo seat with tilt down cushion of Applicants' present invention eliminating the critical Sturt et al (U.S. Patent No. 6,123,380) reference elements of a special floor well, two sets of tracks, disconnection of the seat assembly from one set of tracks to lower it into the foot well area, and a stacked folded seat.

Claims 1, 4 – 5, 8 – 9, 12 – 13, and 16 were rejected under 35 U.S.C. 102(e) as being anticipated by Macey (U.S. Patent No. 6,817,670 B2). Specifically, the Examiner states:

Macey teaches a split folding and reclining seat assembly for mounting to a vehicle floor comprising a pair of passenger seats 100 which may be independently folded

Appl. No.: 10/708,996
Amdt. Dated: 5/8/2006
Reply to Office action of: 03/07/2006

from a seating position to a cargo position and back with a minimum of effort for use in a vehicle providing a split folding seat assembly in which the seat cushion is moved forward and downward into the passenger foot area and the seat back is moved forward and downward into the space previously occupied by the seat cushion providing a flat load floor over a cargo area and the seat back comprising in cooperative combination: a pair of seat cushion frames 110, each of said seat cushion frames being moveably mounted by their front edges to a pair of legs 114, and said pair of seat cushion frames rear edges moveably mounted to a corresponding pair of seat back frames 120 by a pair of seat folding links and further each said seat cushion frame having a seat cushion mounted thereon; two pair of seat legs 114 having one end of each of said two pair of seat legs moveably mounted to the front edge of each of said seat cushion frames and the other end of each of said two pair of seat legs moveably mounted to a vehicle floor; a pair of seat back frames, each of said seat back frames being moveably mounted on their bottom edges to the rear edge of the corresponding seat cushion frame by a pair of seat folding links, and further attached by their bottom edges by a pair of hinges to a pair of parallel seat tracks 130, and further each of said pair of seat back frames having a head restraint mounting member to which are attached a desired number of head restraints 128 and each of said seat back frames having a seat back cushion mounted thereon, and a pair of parallel tracks fixedly mounted to a vehicle floor for each of said pair of passenger seats having a seat back frame mounted thereto by means of a hinge allowing the seat backs to be independently moved laterally along the pair of parallel tracks during the folding and unfolding of each of said passenger seats, said split folding seat assembly is adapted to be mounted on a vehicle floor having a configuration allowing said split folding seat assembly when in a folded position to provide a cargo surface contiguous with the vehicle cargo floor.

Applicant respectfully traverses this rejection. The key to Applicants' invention, as mentioned above, is a folding split seat assembly which allows for the easy rising and lowering of one or both of the split seats where the seat folds downward and forward so that the folding front legs and the seat cushion and seat back may be lowered into the foot

Appl. No.: 10/708,996
Amdt. Dated: 5/8/2006
Reply to Office action of: 03/07/2006

well of a vehicles floor pan thus eliminating the need for special floor pan designs to receive same. Further, Applicant's invention provides for a means of moving the seat cushion forward and downward into a portion of the foot well area of a floor pan and then allowing the seat back to move downward into the space previously occupied by the seat cushion when it was in the seating or use position. Additionally, Applicant's claimed invention provides for an additional head restraint support allowing the mounting of more than one head restraint on a single seat back, and an assembly configuration with provision for under seat storage compartments.

A fair reading of Macey (U.S. Patent No. 6,817,670 B2) discloses a folding seat comprising a seat back fixedly attached to a pivot mounted in a vehicle floor pan (see for example, Col. 2 lines 51 – 56, and Figs 3 and 4) and a seat cushion mounted on a pair of moveable front legs (see for example, Col. 1, lines 51 – 53, Col. 2, lines 26 – 31, Figs. 3 and 4) and having a back edge which moves along a pair of parallel tracks (see for example, Col. 2, lines 32 – 34 and 41 – 47, and Figs. 3 – 4). An articulated linkage is provided between the rear edge of the seat cushion and the bottom edge of the seat back (see for example, Col. 1, lines 29 – 39, Col. 2, lines 37 – 40, and Figs. 3 – 4) to allow the seat cushion to move along said tracks and allow the seat back to fold down on top of said lowered seat cushion to provide a stacked folded seat assembly (see for example, Col. 2, lines 51 – 56, and Fig. 4). There is nothing in the Macey (U.S. Patent No. 6,817,670 B2) reference which discloses, teaches, or suggests to one skilled in the art how to eliminate the critical elements of the reference, namely the bottom edge of the seat back being fixedly attached to the floor pan, the articulated linkage required to allow the seat back to be stacked at top the seat cushion which then moves forward and downward into the foot well, to arrive at Applicant's claimed invention. Furthermore, in light of the fact that Applicant's claimed invention specifically is limited to a folding split seat assembly not having the seat back fixedly attached to the floor pan, or the critical requirement of the seat cushion moving along a pair of parallel tracks, there is clearly no way one skilled in the art can arrive at Applicant's invention from the Macey (U.S. Patent No. 6,817,670 B2) reference without first having read Applicant's application.

Clearly, when viewed in this light the Macey (U.S. Patent No. 6,817,670 B2) reference does not disclose, teach, or suggest the rear fold down cargo seat with tilt down

Appl. No.: 10/708,996
Amdt. Dated: 5/8/2006
Reply to Office action of: 03/07/2006

cushion of Applicants' present invention eliminating the critical Macey (U.S. Patent No. 6,817,670 B2) reference.

Claims 2, 6, 10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of the references above in view of Maruta et al (U.S. Patent No. 6,375,255 B1). Specifically, the Examiner states:

The above references do not teach an additional head restraint support member. However, Maruta et al teaches an extra head restraint member to be old. It would have been obvious and well within the level of ordinary skill in the art to modify the seat assembly, as taught by the above references, to include an additional head restraint support member, as taught Maruta et al, since such an arrangement would provide comfort and safety to a third passenger if needed.

Applicant respectfully traverses this rejection. The key to Applicants' invention, as mentioned above, is a folding split seat assembly which allows for the easy rising and lowering of one or both of the split seats where the seat folds downward and forward so that the folding front legs and the seat cushion and seat back may be lowered into the foot well of a vehicle's floor pan thus eliminating the need for special floor pan designs to receive same. Further, Applicant's invention provides for a means of moving the seat cushion forward and downward into a portion of the foot well area of a floor pan and then allowing the seat back to move downward into the space previously occupied by the seat cushion when it was in the seating or use position. Additionally, Applicant's claimed invention provides for an additional head restraint support allowing the mounting of more than one head restraint on a single seat back, and an assembly configuration with provision for under seat storage compartments.

A fair reading of Maruta et al (U.S. Patent No. 6,375,255 B1) discloses a folding seat assembly comprising a pair of folding seats and a third middle seat (see for example, Col. 2, lines 29 – 33, and Fig. 1) each of the three seats having but a single head restraint. The Maruta et al (U.S. Patent No. 6,375,255 B1) does not disclose, teach, or suggest to one skilled in the art how to modify the teachings of the Sturt et al (U.S. Patent No. 6,099,072) reference, the Sturt et al (U.S. Patent No. 6,123,380), or the Macey (U.S. Patent No. 6,817,670 B2) reference to provide for more than a single head restraint mounted on an individual seat. In fact, in order to provide for a third head restraint a third

Appl. No.: 10/708,996
Amdt. Dated: 5/8/2006
Reply to Office action of: 03/07/2006

seat is required and that seat is not capable of folding down but must instead be removed from the cargo area (see for example Col. 2, lines 53 – 60) thus clearly teaching away from both multiple head restraints on a single seat back and a seat assembly that can have all passenger seating assemblies folding into the foot well area.

Clearly, when viewed in this light the Maruta et al (U.S. Patent No. 6,375,255 B1) reference does not disclose, teach, or suggest the multiple head restraints on a single seat of Applicants' present invention.

Claims 3, 7, 11, and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over any of the above references in view of Skelly et al (U.S. Patent Application Publication No. 2006/0006704 A1). Specifically, the Examiner states:

The above references teach the structure substantially as claimed but does not teach the storage compartment as defined in claims 3, 7, 11, and 15. However, Skelly et al teaches such a storage compartment to be old. It would have been obvious and well within the level of ordinary skill in the art to modify the seat assemblies, as taught by the references above, to include a storage compartment, as taught by Skelly et al, since it would provide a place for storing items when the seat is in use.

Applicant respectfully traverses this rejection. The key to Applicants' invention, as mentioned above, is a folding split seat assembly which allows for the easy rising and lowering of one or both of the split seats where the seat folds downward and forward so that the folding front legs and the seat cushion and seat back may be lowered into the foot well of a vehicle's floor pan thus eliminating the need for special floor pan designs to receive same. Further, Applicant's invention provides for a means of moving the seat cushion forward and downward into a portion of the foot well area of a floor pan and then allowing the seat back to move downward into the space previously occupied by the seat cushion when it was in the seating or use position. Additionally, Applicant's claimed invention provides for an additional head restraint support allowing the mounting of more than one head restraint on a single seat back, and an assembly configuration with provision for under seat storage compartments.

A fair reading of Skelly et al (U.S. Patent Application Publication No. 2006/0006704 A1) discloses a non-folding seat having a storage assembly associated

Appl. No.: 10/708,996
Amdt. Dated: 5/8/2006
Reply to Office action of: 03/07/2006

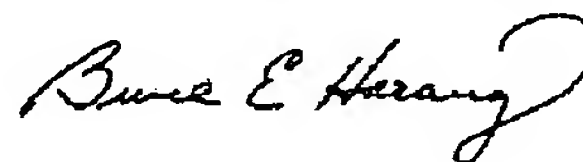
therewith and which may be mounted in various configurations under said non-folding seat assembly seat cushion. The Skelly et al (U.S. Patent Application Publication No. 2006/0006704 A1) does not disclose, teach, or suggest to one skilled in the art how to modify the teachings of the Sturt et al (U.S. Patent No. 6,099,072) reference, the Sturt et al (U.S. Patent No. 6,123,380), or the Macey (U.S. Patent No. 6,817,670 B2) reference to provide for storage beneath the seat cushion frame of a folding seat assembly adaptable to be folded into a foot well area to provide a flat cargo area, thus clearly teaching away from storage under a seat cushion frame of a folding seat assembly folding into the foot well area.

Clearly, when viewed in this light the Skelly et al (U.S. Patent Application Publication No. 2006/0006704 A1) reference does not disclose, teach, or suggest the provision of a storage device mounted to the bottom of a seat cushion frame that is part of a folding seat assembly as claimed in Applicants' present invention.

Applicant notes the references cited by the Examiner but not used as a basis of rejection. In view of these references not being a basis of rejection, Applicant makes no further comment about them.

In view of the remarks herein, and the amendments hereto, it is submitted that this application is in condition for allowance, and such action and issuance of a timely Notice of Allowance is respectfully solicited.

Respectfully submitted,



Bruce E. Harang
Registration No. 29,720
Tel.: (360) 903-4693